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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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06/05/2001

Hannu Paunonen

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08/28/2006

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EXAMINER

VU, KIEU D

ART UNIT

PAPER NUMBER

2173

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,459

Applicant(s)

PAUNONEN, HANNU

Examiner

Kieu D. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-8, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinzer (USP 6031453) and Engdahl (USP 6282455)

Regarding claims 1 and 10, Brinzer teaches steps of controlling process in a process control system, in which a terminal (Fig. 1) is provided for displaying symbols illustrating process elements and information about the status of the process (col 1, lines 7-9), being related to process elements in the operating environment of the process (col 1, lines 42-44), the steps comprising providing, on said terminal, a process graphic diagram for illustrating the process by symbols representing one or more process elements and information about the status of the process (col 2, lines 13-17; col 3, lines 1-8); selecting a part of the process graphic diagram, providing, on said terminal, a graphic image corresponding to the selected part of the process graphic diagram (col 4, lines 6-13), the graphic image being allotted to a process element and showing the location of the process element in the real environment portion, wherein the graphic image is displayed in the operating environment of the process control system when the process is running (after clicking the mouse 12 on the defective electrical

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component 7', the part of the circuit diagram of this electrical component 7' in which the fault has occurred is displayed on monitor 10 and the fault is highlighted (Fig. 5, Fig. 9) (col 5, lines 27-32)

Brinzer further teaches the process element is at least one of an actuator, pump, measuring devices and process equipment parts (col 3, lines 9-25). Brinzer does not teach that the graphic image is a virtual image which is a model of a real field environment. However, such feature is known in the art as taught by Engdahl. Engdahl teaches a human/machine interface for monitoring of control programs used for control of factories (col 1, lines 5-8). Engdahl further teaches an interface program to provide a three-dimensional representation of a virtual factory (col 2, lines 19-44) (see Fig. 3-5). It would have been obvious to one of ordinary skill in the art, having the teaching of Brinzer and Engdahl before him at the time the invention was made, to modify the system taught by Brinzer to include the displaying 3-dimensional view of the concrete place taught by Engdahl with the motivation being to enable the operator to view the concrete places of the plant in 3-dimensional view.

Regarding claims 2 and 12, Brinzer teaches the graphic image is displayed by activating with an input device of the terminal the representation corresponding to a desired process element and displayed on the display device of the terminal, said representation comprising at least one of a symbol and text that indicates said process element (see Figures 3-5).

Regarding claim 3, Brinzer teaches that a separate graphic image is provided for each of a plurality of process element (col 5, lines 22-32; Fig. 5).

Regarding claim 4, Brinzer teaches at least some of the process elements are illustrated in a same graphic image and a process element whose virtual image can be displayed as a graphic image of its own, is shown in the graphic image in a distinguished manner, said showing comprising one of by circling, by a changed background, by a symbol, and in a corresponding manner (Fig. 3).

Regarding claim 5, Brinzer teaches the graphic image is a retrieved graphic image (col 5, lines 22-32; Fig. 5) which can be displayed with a display device of the terminal in parallel with corresponding information indicating the status of the process (col 3, lines 62-67), said information being information related to the process element being displayed, in such a way that the information is displayed ready within the retrieved graphic image (col 4, lines 1-5).

Regarding claim 7, Brinzer teaches the graphic image comprises one or several portions which can be displayed as a separate graphic image of its own (col 3, lines 27-29), wherein said separate graphic image is at least one of a more detailed view and an image provided with additional data (col 4, lines 1-5).

Regarding claim 8, Engdahl teaches three-dimensional graphic image is enlargeable (col 7, lines 10-15).

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brinzer, Engdahl, and Itoh (EP 0716364).

Regarding claim 6, Brinzer differs from the claim in that Brinzer does not teach that the terminal is portable and is in a wireless data transmission connection with the process control system. However, such feature is known in the art as taught by Itoh. Itoh teaches an operator support system used in controlling a plant (col 1, lines 3-12).

Itoh teaches that the display can be portable (col 16, lines 27-33). It would have been obvious to one of ordinary skill in the art, having the teaching of Brinzer, Engdahl, and Itoh before him at the time the invention was made, to modify the system taught by Brinzer to include the portable terminal taught by Itoh with the motivation being to enhance the portability and flexibility of the system.

4. Applicant's arguments filed 06/14/06 have been fully considered but they are not persuasive.

Applicant's argument "Brinzer does not teach a graphic image which is a virtual image of the selected part of the process graphic diagram" attacks Brinzer reference individually since Brinzer teaches, upon selecting a part of the process graphic diagram, displaying a graphic image corresponding to the selected part of the process graphic diagram, the graphic image being allotted to a process element and showing the location of the process element in the real environment portion, wherein the graphic image is displayed in the operating environment of the process control system when the process is running (after clicking the mouse 12 on the defective electrical component 7', the part of the circuit diagram of this electrical component 7' in which the fault has occurred is displayed on monitor 10 and the fault is highlighted (Fig. 5, Fig. 9) (col 5, lines 27-32). Brinzer differs from the claim in that Brinzer does not teach that the graphic image is a virtual image corresponding to a 3-dimensional view. Engdahl is combined to cure this deficiency. Engdahl teaches a human/machine interface for monitoring of control programs used for control of factories (col 1, lines 5-8). Engdahl further teaches an interface program to provide a three-dimensional representation of a virtual factory (col 2, lines 19-44) (see Fig. 3-5). Therefore, Applicant's argument attacks the Brinzer

reference individually since the argument does not consider the teaching of Engdahl in the combination of the rejection. It is noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's argument "Engdahl does not disclose showing 2-dimensional process graphic diagram" attacks the Engdahl reference individually since the main reference Brinzer teaches 2-dimensional process graphic diagram (Fig. 5, 8, 9). It is noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that "Engdahl does not disclose showing a 3-dimensional graphic image of a process element as a result of a selecting a 2-dimensional process graphic of the process element with an input device", it is noted that the features upon which applicant relies (i.e., showing a 3-dimensional graphic image of a process element as a result of a selecting a 2-dimensional process graphic) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kieu D. Vu. The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM at 571-272-4057.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached at 571-272-4048.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

571-273-8300

and / or:

571-273-4057 (use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper / amendment be faxed directly to them on occasions).

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kieu D. Vu

Primary Examiner